

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A computer system comprising a main system to execute an application in cooperation with a human user and a remote service system to evaluate problems in the main system,

the main system comprising a database, an application server and a front-end server, and

the service system comprising:

a service module configured to collect problem related data from the main system, said problem related data representing a problem identified about data in the main system[[,]];:

an acquisition module configured to acquire knowledge representations,
~~said knowledge representations defining solution identification rules;~~

a knowledge module configured to ~~store~~ receive the knowledge representations and store the knowledge representations with sets of semantically grouped solution identification rules[[,]]; and

an inference module configured to process problem related data with knowledge representations to identify solutions and forward the solutions through the service module to the main system, wherein the inference module identifies the solutions by applying knowledge representations in at least one of a

sequential order, a hierarchical order, and a dynamically adaptive order and
wherein the identified solutions are applied to solve the problem identified in the
main system.

2. (Original) The computer system of claim 1, wherein the main system and the service system communicate through remote function call connections provided by the service module.

3. (Original) The computer system of claim 1, wherein the service module monitors the application server and the database according to instructions from the inference module.

4. (Original) The computer system of claim 1, wherein the main system and the service system are systems in client/server configuration.

5. (Currently Amended) The computer system of claim 1, ~~wherein in the service system, the inference module is adapted to process problem related data with knowledge representations to identify solutions and to return solutions to the main system,~~ wherein the service system returns solutions that solve the problem directly in the main system.

6. (Currently Amended) The computer system of claim 1, ~~wherein in the service system, the inference module is adapted to process problem related data with knowledge representations to identify solutions and to return solutions to the main system,~~ wherein the service system returns solutions that solve the problem indirectly by being further knowledge representations for a further inference module operating for the main system.

7. (Currently Amended) A method to evaluate problems in a main computer system that has a database, an application server, and a front-end server and that executes an application in cooperation with a human user, the method comprising the following steps:

collecting problem related data from the main system by a service module of a remote service system, said problem related data representing a problem identified about data in the main system;

acquiring knowledge representations by an acquisition module of the service system, ~~said knowledge representations defining solution identification rules;~~

receiving the knowledge representations by a knowledge module;

storing the knowledge representations with sets of semantically grouped solution identification rules by ~~[[a]]~~ the knowledge module of the service system;

processing problem related data with the knowledge representations by a inference module to identify solutions~~[[;]]~~ wherein the inference module identifies the

solutions by applying knowledge representations in at least one of a sequential order, a hierarchical order, and a dynamically adaptive order;

forwarding the solutions through the service module to the main system; and
applying the identified solutions to solve the problem identified in the main system.

8. (Currently Amended) The method of claim 7, wherein in the step of processing, the inference module performs an action selected from the group of:

identify the solutions form set of predefined advices of the application,
~~identify the solutions by applying knowledge representations in a sequential order,~~
~~identify the solutions by applying knowledge representations in a hierarchical order,~~
~~identify the solutions by applying knowledge representations in a dynamically adaptive order,~~

communicate questions to the user by composing the questions from predefined passages provided by the application, and
analyses responses that the user enters in natural language.

9. (Original) The method of claim 8, wherein the service system forwards problem data and solutions for further analysis by a human technician.

10. (Original) The method of claim 8, wherein the service system forwards problem data and solutions to the further computer in a format that allows analysis by an expert system in the further computer.

11. (Original) A computer program product comprising program code means for performing all the steps of anyone of the claims 7-10 when the computer program product is run on a computer.

12. (Currently Amended) An inference module with expertise functionality for evaluating problems in a main computer system that executes an application, wherein the inference module is adapted to process problem related data with knowledge representations to identify solutions, said knowledge representations being stored with sets of semantically grouped defining solution identification rules,

the inference module characterized in that the inference module is part of a service system receiving problem related data from the main computer system over a network, said problem related data representing a problem identified about data in the main system,

and returning solutions to the main system, wherein in a first case, the service system returns solutions that solve the problem directly and, in a second case, the

service system returns solutions that solve the problem indirectly by being further knowledge representations for a further inference module[.].

wherein during the processing of problem related data, the inference module identifies the solutions by applying knowledge representations in at least one of a sequential order, a hierarchical order, and a dynamically adaptive order.

13. (Original) The computer system of claim 1, wherein the main system executes an enterprise resource planning application.

14. (Original) The computer system of claim 1, wherein the main system is implemented as an R/3 system.